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MARGINAL UTILITY AND MARGINAL DIS-
UTILITY AS ULTIMATE STANDARDS
OF VALUE

SUMMARY

The current theory of value fails to take account of inequality, 547.—Value as a “ratio in exchange” to be qualified, 549.—Utility as the ultimate standard of value, 552.—Disutility as the ultimate standard; labor, 557.—The sacrifices of capitalists, 560.—The valuation of services, 462.—Non-competing groups, 569.—Conclusion: The ultimate standard of value does not exist in a modern society, 575.

IN the familiar marginal utility theory of value now current, it has been frequently true that only passing attention has been paid to the effect of inequalities of income, and to the greater or less degree of concentration of property rights, in discussing social and individual utility, and disutility. A text for the ensuing discussion may be found in a quotation from Marshall's chapter on value and utility.¹ The marginal note gives the substance of the discussion briefly: “In regard to different people allowance may have to be made where necessary for differences of sensibility and

¹ Marshall, *Principles of Economics*, ed. 4, 1898, Book III, ch. vi, sec. 3, p. 205–206. For a later discussion with careful caution as to the effect of inequality, cf. Taussig, *Principles of Economics*, ch. ix, *passim*, esp. sec. 5.

for differences of wealth; but it is seldom needed in considering large groups of people.” The section concludes: “On the whole, however, it happens that by far the greater number of the events with which economics deals, affect in about equal proportions all the different classes of society; so that if the money measures of the happiness caused by two events are equal, there is not in general any very great difference between the amount of happiness in the two cases. And it is on account of this fact that the exact measurement of the consumer’s surplus in a market has already much theoretical interest, and may become of high practical importance.”¹

It is this cavalier dismissal of the effect of “differences of wealth” and “differences in sensibility” that is challenged. Economic events do not “affect in about equal proportion all the different classes of society.” Nor is the “money measure” a true measure of the happiness caused by two events; nor of the same events to two different persons, nor yet of the *marginal* effect of the event on two different classes of the society or two differently situated individuals. The problem of value in a modern society cannot be dissociated from the contemporaneous degree of concentration of wealth; nor can it be solved without careful study of the existing situation in regard to concentrated control of productive power, which means as a resultant, differences in income.²

¹ Cf. Clark, *Distribution of Wealth*, p. 380.

“Similarly, if all society acts in reality as one man, it makes such measurements of all commodities, and the trouble arising from the fact of many measures disappears. A market secures this result, for society acts as a unit — like an individual buyer.”

² Cf. Davenport: *Value and Distribution*. In *Summary of Doctrine*, p. 571, “To different men, utilities, marginal utilities and subjective worth are, as such, incapable of comparison; nor is it possible to give to utility, marginal utility, or subjective worth expression or measurement in terms of money. A maximum demand price expresses merely the equivalence in point of subjective worth of the thing bid for and the thing otherwise to be obtained through the purchasing power.” See also the same thought, pp. 312–313 and p. 536.

Existing knowledge and statistics on this vital subject are admittedly defective, but for illustrative purposes the summary of incomes in Great Britain given by Professor Taussig may be quoted: — ¹

1.	No. of families having incomes under	£160	6,775,000
2.	" " " between 160 and 700 "	830,000	
3.	" " " 700 " 2,000 "	122,000	
4.	" " " 2,000 " 5,000 "	32,000	
5.	" " " 5,000 " 50,000 "	14,200	
6.	" " " over 50,000	350	

For convenience we may designate class one as poor; two and three as well-to-do; four as moderately rich; five as rich; and the sixth as the millionaire class. The poorest class, then, constitutes over 87 per cent of the population, reckoning the family as the unit; the three richest classes much less than one per cent; the well-to-do classes nearly 12 per cent. To further quote the text: "In a population of 43,000,000 about 5,000,000 belong to families having an income of one hundred sixty pounds a year or more, and these 5,000,-000 have about one-half of the total income of the British people; the remaining 38,000,000, with incomes of less than 160 pounds, have the other half of the total income."

What, then, will be the bearing of such inequality in incomes, and, as a corollary, of such concentration in the control of the factors of production, on the problems of value? Passing reference may first be made from the standpoint of value as a ratio of exchange between commodities. It is obvious that any influence tending to level the inequalities by a more equal distribution may easily disturb the existing scheme of value ratios. If, for example, the small millionaire class were to be reduced to the level of the well-to-do

¹ *Principles of Economics*, vol. ii, ch. 54, sec. i, p. 240.

and its control of income beyond that limit to be distributed among the poor, automobiles and hot house flowers would be over plentiful and their value would fall by comparison with all other commodities. On the other hand, clothing, housing, and in general the marginal purchases of the poor would be scarce and their value would rise by comparison with all other commodities. To state the effect in different terms, it will now be worth while to expend more land, labor and capital to produce the new marginal bushels of wheat, marginal housing, and the like; while it will not be worth while to expend as much land, labor and capital as before to produce the marginal automobiles and goods of luxury. It serves no purpose to multiply illustrations of this sort, since the obvious effect is the same. The conclusion is inevitable that in any modern society, back of the established exchange ratios — relative values of goods of necessity, comfort, and luxury — lies the question of the existing measure of concentration of wealth and income. If the society approaches near to equality, goods of necessity rank high; goods of luxury are practically unvalued, no one buys them. If it has one per cent of rich and 12 per cent of well-to-do absorbing half the national income, goods of luxury will be accounted of high value. The ultimate test and measure is the amount of productive energy which society considers it worth while to expend on the various goods.¹

¹ Cf. Wieser, *Natural Value*, pp. 61-62. "The relation of Natural value to Exchange value is clear. Natural value is one element in the formation of Exchange value. It does not, however, enter simply and thoroughly into exchange value. On the one side it is determined by human imperfection, by error, fraud, force, chance; and on the other side by the present order of society, by the existence of private property and by the differences between rich and poor as a consequence of which latter a second element mingles itself in the formation of exchange value, namely, purchasing power. In Natural value, goods are estimated simply according to their marginal utility; in the exchange value, according to a combination of marginal utility and purchasing power. *In the former, luxuries are estimated far lower, and necessities comparatively much higher than in the latter.*"

Turn then to a question which has long exercised the best talents of economists: what is the ultimate standard of value? ¹ Here we find such persistent lack of agreement as to suggest the need of further analysis. It is the thesis of this paper that the confusion of thought in value discussions, and the clash of opinion as to the relative importance of marginal cost and marginal utility as determinants of value, are alike due to a lack of proper emphasis on the dominant fact of inequality in modern societies. Some have more power of control over productive energy, some less. As a result, the attempt to apply either standard means an attempt to combine incommensurable and incomparable quantities.

In regard to the ultimate standard of value, two divergent explanations hold the field. One finds this ultimate standard in the sacrifice entailed in producing goods. It is the "pain suffered by society as a whole in the final period of daily labor [that] is the *ultimate unit of value.*" ² The other bases its theory on the satisfaction conferred in the consumption of goods. It answers the question in a single phrase, using the general expression "human well-being." "The ultimate standard for the value of all goods is the degree of well-being which is dependent upon goods in general. If, however, we desire a more concrete standard, one which will give us a more definite idea just how goods are connected with well-being, then we must take not one, but two, standards, which tho coördinate in theory are yet of very unequal practical importance, because of the greater prevalence of the phenomena in which one of them is operative; one is the utility of the good,

¹ Clark, *Distribution of Wealth*, p. 375. "The entire study of wealth is indeed meaningless unless there be a unit for measuring it, for the questions to be answered are quantitative."

² Clark, *Distribution of Wealth*, ch. xxiv. p. 392.

and the other is the personal sacrifice or disutility involved in the acquisition of the good. The domain of the latter is much more limited than we usually think. In the great majority of cases, even in those in which the so-called law of cost undoubtedly plays a part, the final determination of the value of goods is dependent upon utility.”¹

Considering the utility standard first, it will be well to revert to our classification of incomes in Great Britain and endeavor to get a clear conception of the utilities, and particularly the marginal utilities enjoyed by the individual members of that society. First, as to the poor, comprising 38 millions out of the 43, and restricted in their gratification to half the national dividend. For these, the tale is soon told. They can enjoy only goods of necessity and these in but scanty measure. Their food is coarse; their fare monotonous. In its preparation and partaking little concession is made to taste and convenience. Dishes are crude and few; linen coarse or absent. The general environment in which meals are taken is often most distasteful, even to those well accustomed to the habitations of the poor. In the same way their clothing will be scanty in supply, ill fitting, and poor in quality. It affords little gratification beyond the line of absolute necessity. Housing will be limited to the minimum needed for shelter from the elements. Comfort, even decency, must often be disregarded. The habitation will be located in the least pleasant and healthful quarters. In general the marginal utilities enjoyed by this 87 per cent of the population will rarely extend beyond the limits of a “pain economy.” Anxious fear of want and suffering attend them daily and these fears are not infrequently realized.

¹ Böhm-Bawerk in concluding his article on “The Ultimate Standard of Value,” Annals of the Amer. Acad., vol. v, pp. 207-208.

The second class, our moderately well-to-do, substitute for this meagre equipment of food, clothing, and housing both an enlarged supply and one more refined in quality. It is consumed with more regard to the refinements of taste and comfort. Clothing is more plentiful and comelier. It brings an income in gratified vanity as well as in the satisfaction of grim necessity. In their housing they are less cramped for space. They exercise freer choice as to location. Their houses are sanitary. Their surroundings are moral. In each of the three prime necessities, they both spread their initial purchases over a larger area and carry them through more units before the marginal enjoyments are reached. Moreover, they add new consumption and new forms of income to those possible for the 38 million poor. Their children are better educated. They may aspire to the training of the academy instead of being content with the minimum legal requirement of school attendance. The adults may have some acquaintance with music, art, the theatre, and literature in its cruder and cheaper forms. In short, life is broader and more care free. More utilities are enjoyed beyond the line of a mere pain economy. More experience is gained in the realm of pleasure economy. Their marginal utilities begin at the highest limit of the poor class and extend still higher.

Similarly the conception must be carried through each of the four other classes. In each, marginal purchases begin at the highest limit of the class preceding; the line of marginal consumption is carried to yet higher levels. Each enjoys both more and better units of the three fundamental goods: food, clothing, and housing. Each adds new utilities beyond the range of the poorer class. To vivify the picture and

give scientific accuracy to the conception, we should add concrete statement of the marginal utilities consumed by the richest or millionaire class. Of the three prime necessities, food, clothing, and shelter, they consume to limits set by satiety. The best that education, music, literature, art, and travel can offer are theirs. Their final utilities are found in such luxury goods as automobiles, yachts, private parks, rare gems and flowers, and benefactions, rendered less or more publicly, to schools, libraries, churches, and charities.

Here are non-competing groups in consumption as truly as in production and the importance of the conception in economics is not less. For the marginal utilities, in terms of which it is attempted to measure value, represent no common terms. They are truly incommensurable. Each individual distributes his possible income among his various wants and reaches an equilibrium at the margin by purchasing more units of the goods satisfying pressing wants. How far he can go in supplying his wants, or a want, is determined by his income which again depends in the last analysis on his control of productive power. Each class likewise balances its various wants, buying much or little of various commodities and establishes a line of marginal utilities limited by the income for the class divided among the members, again in proportion to their control of productive power. For the society as a whole a similar process takes place and a line of marginal utilities is established. But the bulk, so to speak, of consumption and of total utility differs widely with the different classes. For each individual among the 38,000,000 poor it is small in basal area, of modest height and, it may be added, of poor quality throughout. It comprises few goods; these are crude, poorly made and inferior. But few units of each may

be enjoyed before each line of consumption impinges on the marginal line fixed by the size of the income. Far differently in the case of the 1000 members of the millionaire class. Here the base is broad. All commodities produced minister to their necessities, comfort, elegance, and vanity. Of them all they select only the best. Of each they consume in greater measure. Most commodities yield many more units before their consumption is cut off by the limiting margin. With incomes so large they are all but unlimited in their consumption.

How, then, will the attempt fare to find in marginal utilities an ultimate standard of value, a positive measure or unit? On this line lie the final units of food, clothing, and housing which barely maintain life in the very poor. Here are found the final units of more appetizing food, comelier clothing, and more elegant housing enjoyed in comfortable security by the well-to-do. And here are the last units of the same goods consumed in wasteful profusion and satiated indifference by the rich and the very rich. Examples may be multiplied, but these will serve the turn.

Let the national dividend be impaired in any way, *e. g.*, by long continued unfavorable weather or by impairment of land through loss by conquest or through exhaustion of fertility, and the final units of consumption for each class and for each commodity consumed will be first foregone. In this sense they are accounted of equal utility. But the rich will be annoyed; the well-to-do painfully inconvenienced; the poor distressed. Let the contrary take place, and the productive power of the society produce a larger national dividend. The poor may then add and enjoy more and better units of food, clothing, and housing on their margin of consumption. To many of them it will mean

rescue from acute suffering. The well-to-do may have added units representing long considered and oft deferred comforts and infrequently enjoyed luxuries. The rich must exert their imaginations to find new utilities worthy of consumption.

Can the units of utility lost or added be said to be in any real sense either equal or similar? Society indifferently produces the added units for either rich or poor according to their command of income. But the utility produced for the gratification of the poor is at a low level, little removed from the domain of a pain economy. That produced for the well-to-do probably yields the maximum of satisfaction. The addition to the consumption of the millionaire may only add to his indifference and satiety. The conclusion seems inevitable that it is impossible to find the ultimate standard of value in marginal utilities, if a society be composed of classes with so great inequality of income as exists today. The standard will not be the marginal utilities found in the painful economies of the 38,000,000 poor; nor yet that of the satiated 1000 millionaires. It cannot fairly be the marginal utilities enjoyed by the 12 per cent of well-to-do. Nor can an average be struck of these essentially incommensurable units. They are irreconcilably unlike in kind and quality. No final answer to the century old controversy can be found here, and the reason lies in the inequalities existing in our modern society. Politically, our modern society may be a democracy. Industrially it always grants multiple votes to some more, and other much, favored members. This larger control they translate into larger and higher enjoyments, and fewer and less painful sacrifices.

This brings us to the second attempted measure of value: "the pain suffered by society as a whole in the

final period of daily labor." Here again, effort may be profitably spent in the attempt to gain a clear view of the concept needed. The labor supply of a modern society is an elastic one. In that supply the family is rightly to be considered the sacrificing unit. At a maximum, all members above infancy may labor each day for a number of hours, limited only by the danger of shortening life and thus reducing the labor actually supplied. The individuals composing it may continue actively engaged until retired by the last illness. The poorest families approach nearest to this maximum. As the income increases, the amount of labor endured is progressively reduced. The mother withdraws from active labor and increases the family income by her efforts in adding comforts in the home. The amount of child labor is decreased. A longer period is given to education and training. Fewer hours are devoted to labor, more to recreation and family life. Finally, holidays decrease the amount of time given over to labor. Working men demand a Saturday half holiday. Well-to-do insist on an annual fortnight's vacation in addition. The classes with larger incomes have weeks off semi-annually or quarterly, while the rich submit to but slight encroachment on their leisure and self-culture. Such a lessening of the sacrifices endured by the family units for production's sake marks the rise of a progressive society. Equally they mark the rise of a family from class to class. The answer to the question: does she do her own washing? decides many a family's place in the social estimation. Has he leisure for golf? marks others. Here, too, rests the explanation of the extreme difficulty with which any marked increase in real wages takes place. Let real wages in any field rise and there always stands waiting a fund of potential labor to

crowd the industrial ranks. An extra week in the year from the margin of indifference of the highest class; an extra day in the week from the well-to-do; an hour overtime from the poor; some weeks of service from the girl or woman whose pride as a member of the leisure class is overcome by the added remuneration; some additional child labor, a sacrifice by over-tempted indigent parents, — and the movement toward higher wage levels is checked.

Add to the above conception of the disutility of labor based on the time element, the familiar idea of its relative disutility based on the degrees of agreeableness of working conditions and on intrinsic interest of the task, and the same diversity among the sacrifices of various classes appears. Let the family still be the unit. The poor man and his wife and children endure laborious, monotonous, and exacting toil under the most trying surroundings. Dirt and din and stench are habitually and inextricably associated with labor in their thoughts. Danger, disease, and accident are likewise of the warp and woof of their day's toil. Let any family rise by sudden good fortune from the ranks of poor to those of the well-to-do, and they make all haste to escape from such disagreeable and dangerous tasks. The class of larger income has less toilsome work, and less noisome surroundings, with less risk of disease and accident. The rich labor only in well lighted and commodious offices. They take to themselves the most interesting and stimulating of mental labor. The millionaires often limit their contribution to the disutility of labor to a few days time annually spent with their managers and solicitors. Their labor is dispatched most pleasantly as well as expeditiously.

In a manner very similar to the arranging of the marginal utilities, the final disutilities impinge on the

line of marginal social sacrifices. They too are governed by the laborer's income, and this, it must be insisted, depends in the last analysis upon his control of productive power. The poor family gives many hours per day, many weeks per year, many years per life of the labor of husband and wife. It gives much labor of children and dependent females. In each separate item resides a marginal sacrifice which the family would be quick to withdraw as real income increased. But little extra effort could be supplied even under the stimulus of largely increased reward. In the realm of pain economy, the effort and the disutility of labor endured knows no limit short of that set by the possibilities of physical endurance.

The well-to-do classes illustrate the declining margin of disutility. Both wife and husband work fewer hours, fewer weeks and fewer years. As the scale rises the wife is promoted through an increasing period to the ranks of the leisure class. The same is true of the question of child labor and the position of dependent females. The agreeableness of employment shows a nice adjustment to the size of income. It evidences the position of the family in social estimation as it measures their economic well-being. Similarly for the families higher in the scale than the well-to-do.

How now will the matter stand in a modern society, with 87 per cent of poor, 12 per cent of well-to-do, and one per cent of rich families, if we endeavor to find the ultimate unit of value in the "pain suffered by society as a whole in the final period of daily labor"? Into this composite unit of value go the most diverse of elements. The ditch digger, the coal miner, the steel mill worker, and so on through the list of heavy, deadening, disagreeable and dangerous tasks, bring each their final sacrifice to be reckoned in this socialized

"final period of daily labor." Here they take place beside the "final period" of the well-to-do farmer, artisan and merchant. These lower officers in the industrial ranks do not carry their effort beyond the easily endurable strain of toil. They eliminate disagreeable features. They need not exact severe and constant labor of wife or children. But much of effort goes into the final sacrifice of the head of the family, and this is reckoned in the total. The rich give but little and that under conditions involving least sacrifice. This amount they stand ready to decrease as the size and security of their income increases. But the pain of their final period of daily labor is to be placed in our social unit for measuring value.

Can such dissimilar pains be added or averaged? Will the resultant unit be other than highly artificial? For whom will it measure value in a positive sense? For the poor man impregnated with socialistic doctrine, who sees his painful final period outweighed by the easily rendered final service of the rich, the highly trained or richly gifted? For the rich who look with contemptuous disregard on the stolidly rendered and meagerly fruitful final effort of the poor? Or even for the comfortably well-to-do who proffer complacent advice to the one class and envious moralizing to the other? The unit proposed will satisfy no class, and no individual, unless it be the economic philosopher. It corresponds to no reality. It measures values truthfully for no one when incomes are unequally divided due to an unequal division of control of productive energy.

The above reasoning is not invalidated by its restriction to the pains of labor alone and its failure to include the sacrifices of the capitalist and landlord. In such restriction it follows high authority. It loses in

effectiveness and strength, as well as fidelity to the real situation, however, by such omission. For if we are to use the sacrifice incurred as a measure, clearly the saving of the capitalist and the abstinence of the landowner here have a place and the attempt to find an acceptable unit of disutilities by reducing the diversity of the elements involved is an unfair tampering with the facts for the sake of the result. Society asks not only, "Is it worth while to labor more to acquire these utilities?" But also, "Will it pay to save more for the sake of maintaining or enlarging the national dividend?" And again, "Would it be better to restrict parks, public and private, golf grounds, game preserves and lawns and flower gardens for the sake of larger supplies of wheat and potatoes?" A certain community grew tobacco in its streets in answer to this last query. Many a poor family endures a potato patch in lieu of a lawn for the same reason. On the other hand, the Chancellor of the Exchequer in England is reported as complaining of gentlemen's parks, and game preserves in the community we select as illustrative, basing his objections on the same reasoning.

Add, then, these disutilities to the pains of labor, through the various classes, and how will the account stand? On the score of the sacrifice of the capitalist the question may be an open one. Doubtless the marginal savers extend down among the ranks of the poor, and there is direct personal balancing of the disutility of saving and that of marginal labor. But many families do not save and seemingly cannot.¹ At least, they will not without the compulsion of public insurance laws. Our society with its inequality must often balance the pains of a non-saving labor class against

¹ Taussig, vol. i, p. 76. "The greater part of the capital owned and maintained in modern communities arises from the savings of the comparatively small numbers of the more fortunate classes."

the disutilities endured by a saving labor class and, still again, against those of a saving but almost non-laboring class. Are the pains commensurable? Can a unit be found fairly and truly unifying such various disutilities?

More, while some of the marginal savers may be laborers, by no means all of the marginal savings are here produced. Both classes of well-to-do make savings and marginal savings. They, too, produce marginal units of capital. The disutilities of savings here are rewarded at the same rates by society,—counted equally meritorious and exactly similar to the pains attendant on the painfully acquired and sorely needed accumulations of the poor. Further, the classes of rich also make marginal savings which rank in social estimation with those of well-to-do and poor. The rich man saves a marginal unit of capital in satiated boredom as to present income and careless indifference as to an equally well secured future. The well-to-do saves a marginal unit out of a comfortable present income for a fairly secured future. The poor saves a marginal unit painfully, through severe economizing of a meager present income, because of the pressure of vivid anxiety as to his future position. No class can do less or more. But can these disutilities of saving find a common unit? Even if so, can they be consolidated with the pains of labor? What basis of comparison or consolidation can there be between the disutility involved in furnishing the productive energy comprised in the marginal labor of the poorest families and the disutility involved in saving the marginal units of capital furnished by the richest families? The gap is wide and unbridged. One family is driven by grinding necessity to the last exactions of burdensome toil. The other is impelled to careless saving from sheer satiety.

For the abstinence of the landowner, particularly if one has in mind the broad acres of the English land holding class, little defense is attempted. His choice lies between placing his lands in productive uses and drawing an income from that act of abstinence and enlarging the bounds of his parks, golf grounds and game preserves. His desire for these evidences of his social elevation and his pride in them, may outweigh the votes of thousands for wider wheat fields and larger potato patches. Society accounts the pains of abstinence of its landowning class in continuing marginal acres in cultivation, manufacturing, and merchandising, as of equal worth and dignity with the disutilities in the production of final units of capital or of labor, provided only the resultant additions made to the national dividend be similar. Such a comparison and estimation is inevitably bound up in the institution of private property and in the existing inequalities of wealth. If property in land be highly concentrated and social distinction largely reckoned in the extent and beauty of private grounds, as in England, the disutility of the marginal abstinence of the landowner will be accounted large. The contrary will be true in France and the United States, where ownership rights are divided. The poor man reaps no reward in income for his abstinence in foregoing the profit-making use of land. The well-to-do individuals get a moderate return for carrying their withdrawal of lands from production to a slight extent only. The rich landlord may get all of his princely income as a reward for his abstinence after he has made lordly provision for the private enjoyment of his family. To each man the reward for furnishing a marginal unit of productive power is the same. But, with inequality in possession, how large will be the difference in sacrifices involved? Yet this at-

tempted ultimate standard of value must equate and unify these diverse elements.

Consider, then, the completed conception of the proposed standard. We may paraphrase: the disutilities endured by society in furnishing the final, or marginal, units of productive energy. We must consider, and unify in one standard, the last pains of landless and capitalless laborers; the ultimate sacrifices of the well-to-do, often including marginal labor, marginal savings, marginal abstinence as landholders; and the marginal disutilities of the rich where little labor is rendered, large savings are made and frequent cases of disutilities connected only with the ownership of lands challenge attention. Is it not obvious that any attempt to combine such unlike factors in a single standard must fail? Will it not be even more highly artificial than a standard based on marginal utilities? There, at least, we need consider but one form of enjoyment; here are three diverse sacrifices. Sacrifices, moreover, which frequently do not meet in the same individuals and so are not, in fact, equated. The disutilities endured are unequal in quantity, irreconcilably dissimilar in quality. They are incommensurable and cannot be reduced to any common denominator.

The consideration of the foregoing discussion of marginal utilities and disutilities, and, especially, of the lack of correspondence between sacrifice and reward, leads naturally to the final problem of this discussion: the valuation of services. It raises the problem of Marshall's evil paradox. Why should the most grievous marginal pains be rewarded by the smallest incomes? Why do such inequalities, in final disutilities endured and rewards for those sacrifices, exist and persist? On what basis do existing societies measure in apportioning incomes? Two answers

have been attempted: marginal utility and marginal disutility. It is believed that both fail because of the presence of marked inequalities of wealth in modern societies. Because of these inequalities, it is largely true that the various sacrifices do not meet in the same individuals and hence are not, as a matter of scientific fact, compared and equated. It is the felt need of such a weighing and equating of the several sacrifices and in turn the balancing of them against the rewarding utilities, in the same or equal individuals, that makes the Crusoe society¹ so familiar a figure in economic literature.² A more ambitious creation, avowedly based on this need in any scientific analysis of problems of valuation, is found in Wieser's familiar communistic society and the notion of Natural Value there evolved. Too frequently Wieser's conclusions are used in discussions where his basic hypothesis must be displaced by that of a modern society with its concentration of control of productive powers.

¹ It is just as this point that Clark's analysis fails. Consider these paragraphs (*Distribution of Wealth*, p. 390): "But when a man creates an article and makes it over to society, the condition changes; for he experiences the burden of the production and society gets the benefit. The final disutility of his labor then stands in no connection with the final utility of society's goods. Though the social organism, as a whole, will work till what it gets offsets what it suffers, will a man also work till what society gets from him offsets what he suffers? Obviously when the enjoying falls to one party and the suffering to another, there is no offsetting in the case. There is, therefore, no equivalence established between the disutility of such work and the utility of the product.

" Yet there is an equivalence between the man's sacrifices and his own enjoyments. The pain that he undergoes in making his own product is a payment for other men's products, for it is the personal cost of what he gets. In like manner, the pain that all other men suffer in making products for him represents the cost to them of what they get from him. Between cost and gain there is still an equivalent, and it will furnish us a unit for appraising specific commodities."

My criticism is simply that granting all that is said, there is no true equivalence of cost and gain. In the exchange, cost to A and gain to A may balance in his own estimation and the same may be true for B. But it does not suffice to furnish a unit unless both A's gain truly equals B's gain and A's cost equal B's cost. In such case only will cost incurred by A or B be truly equivalent to gain enjoyed by B or A. For inevitably we are comparing and uniting the income and disutilities of different individuals drawn from different classes.

² See, for an example excellently well put, Böhm-Bawerk's article, *op. cit.*, p. 168.

Some hypothesis like Wieser's is essential in order that a true balancing and equating of the various sacrifices and of these with the rewarding utilities may obtain. For purposes of exposition and contrast, and with a view of doing as little violence as possible to actual conditions, we may venture to create a hypothetical equalistic society. In this each member has equal control of land and capital. Say, for the sake of the discussion, that an enlarged use is made of corporate ownership. The land is owned by corporations in which each citizen has equivalent shares. The capital is likewise in the hands of corporations, with shares so placed that each man exercises equal influence. We may postulate equal training and equal productive power to each laborer. Each member will be laborer, capitalist, and landlord. This hypothesis will not seem extreme, if we recall the earlier quotation in which differences in wealth and differences in sensibility are discounted to the vanishing point. In our equalistic society, then, as in the traditional Crusoe societies, it would always be true that value of product would equal value of labor, would indeed be the reward of the labor or, to expand, of the marginal disutilities. Marginal utility would equal the marginal disutility of labor. For the anticipation of that reward would have stimulated the putting forth of that effort. We may add that the pains of labor would be balanced against and equated to the pains both of the saving of capital and of abstaining from private use of land.

Naturally and inevitably so, for all these sacrifices meet in the same individuals. The same, or equal, individuals estimate all rewards and all pains. Consider the position of the individuals and the society. Each man may say: "Labor is irksome and wearying. It interferes with self-culture and family life. Leisure

is pleasurable and stimulating. It gives opportunity for self-culture. It enlarges one's mental horizon. With it life is at once broader, more fruitful and pleasanter." But he must also say: "If I cut down my working time, the national dividend will decrease. The loss will inevitably be ascribed to my defection and the shrinkage subtracted from my income." With more leisure go fewer goods. True, our citizen would have rent and interest incomes, little affected by his lessened labor. He is better intrenched than the typical modern laborer. But a similar line of reasoning runs against the pain of saving and abstinence from selfish use of lands. If he finds the sacrifice entailed by labor too high, he will equally rebel against a continuance in the former measure of these other disutilities. And equally he will be met by the effective answer that each defection entails an equivalent shrinkage of his income. There can be no vicarious economic suffering or "un-earned increment" in our equalistic society.

Here, as in the Crusoe society, either the marginal utility unit or the marginal disutility unit may serve as the ultimate standard of value. The marginal units of gratification are equal and alike for each final unit of good consumed by any individual. As a reasonable man he has arranged his consumption to that end. Equally the marginal units of satisfaction enjoyed by one man in his consumption of final units of a given good may be directly compared with, and will be found equivalent to, a similar consumption by any other member of the society. And, again, it will be equivalent to the gratification enjoyed by any individual in the society in his final consumption of units of all other goods. As reasonable men enjoying equal incomes, they have arranged their consumption to that end. The line of marginal consumption and marginal

utility runs level through this classless society. Here are like, equal, and commensurable units of pleasure, easily and fairly unified into one standard of value.

On the pain side the same situation would exist. Each man has balanced the disutility of labor, of savings, and abstinence from the selfish use of land, against the utility of the resultant additions to the national dividend. He has measured the three sacrifices against each other as well and they stand in equilibrium. He stands in the same position as all his fellows as to wealth and sensibilities, and his estimate of his own pains is similar and equal to theirs. The line of marginal disutilities, likewise runs level through the classless society. Here are like, equal, and commensurable units of pain easily and fairly unified into our alternative standard of value. Either or both standards may serve the purpose of our detached social philosopher seeking the ultimate standard of value for measuring goods and services in our equalistic society.

But how will he fare if he carry his lantern to our modern England with its one per cent of rich, 12 per cent of well-to-do, and 87 per cent of poor families? Will the same standard serve? Professor Böhm-Bawerk pins his faith to the one; Professor Clark to the other; Professor Marshall to either indifferently. Can the detached social philosopher accept any one of these answers as indicating the correct measure of values? Or must he continue a "perplexed philosopher"? Manifestly, conditions are widely different from those existing in our supposed classless societies: the traditional Crusoe and the hypothetical equalistic. Our detached observer will analyse the process of the valuation of goods and services in a modern society comprehending inequalities of wealth and resultant inequalities of income. He will endeavor to apply his

standards derived from the societies in which inequality does not exist. He will see, as it were, a great market in which services are proffered for sale, their values reckoned and the reckoning paid in terms of real income, *i. e.*, enjoyment. Here come laborers, capitalists and landowners. Each has wants which he would fain have supplied. He calls for necessities, comforts, and luxuries. The list of his needs is capable of indefinite expansion. It is as varied as his nature, training, culture, and imagination dictate. To this call for goods society returns a uniform answer: "With what price do you buy? What have you in your hand?"

The laborer's replies are various. We may group them according to Professor Taussig's analysis of the non-competing groups.¹ The lowest says: "We are diggers and delvers. We are able and willing to labor continuously for nine, ten, eleven or more hours per day." The second group answers: "We buy with a similar measure of productive energy plus some alertness of mind and capacity to bear responsibility. Our price is heavier per man; our coin is finer in quality than theirs." The third group replies: "Each of us buys with all the productive energy of these men and more. We are skilled men. We have sure eyes, familiarity with tools, deft and trained hands." The fourth group adds to all this in its purchase price, more of education and mental equipment and finer sensibilities. Finally the fifth group replies: "We can pay all that these men can offer and more. We have special knowledge in law, religion, and medicine." And here our detached social philosopher will hear the confident reply of the captains of industry through the various grades: "We have resourcefulness, adapta-

¹ See Taussig's *Principles of Economics*, vol. ii, pp. 134, seq.

bility, established trade connections, command of capital, reputation for success in the conduct of affairs. We know the game of business. We are practical men. We get results."

With the fourth group a new note will be struck in the replies. The proffered purchase price will begin to include mention of productive energy in the form of capital and land. The capitalist and land-owner enter the market place. The one says: "I am ready to sell the services of capital; few units if the price in income be low; more if the price in income be higher." The other phrases his offer: "I buy income. I sell the productive energy bound up in land. The higher the price, the more acres shall I be willing to turn over to society's use."

Our philosopher will note that each individual buys as a consumer from a society of which he is a member. He sells as a producer to the same society in which he is likewise a member. He will note the varying eagerness of the buyers; the differing reluctance of the sellers. The poorest laborer in the lowest group snatches eagerly at any price for hours of labor. His labor is his only coin and the standard allotted him is a debased one. He buys with many units of this depreciated coin. Each additional hour's labor spent for income costs heavier sacrifice to the man and his family, but in their estimation it is overbalanced by the utility of the reward. The marginal units of consumption stand so low and the margin rises so slowly that it is long before falling marginal utility of goods meets rising marginal disutility of labor. For the poorest members of the lowest class it may well be doubted if they ever meet. That is to say, it may be expected that this class will willingly supply more manual labor for the current or even a lower reward. If this be not

true, what is the meaning of our present movement for minimum wage boards? Our social philosophers would protect the class against the consequences of its own reckless bidding in the great world market.

Our observer will perceive that with the second class in our modern society, with its inequalities, there begins to appear a progressive moderation in bidding that extends through the ranks. They still furnish some of the most disagreeable sorts of labor. They accept the same pay for it as the lowest class, but they strike a balance by reducing the level of the marginal disutility. They refuse to work the final hours, or constantly through the weeks and the months. They withdraw a measure of the child and female labor. But since each man usually furnishes a better grade of productive power, he reaps a larger income and counts it not worth his while to furnish as many hours. If our detached social philosopher measures both sacrifice and reward by his ideal standards he must conclude that wages are really higher for the second class than for the first. Where their services overlap and each does exactly similar work, under identical surroundings as to agreeableness, the pay in goods per hour will be the same. But the sacrifice entailed on the first class outweighs that endured by the second, since its members work longer hours, more continuously and furnish more laborers per family. Yet for all this even the second class hardly escapes the limits of the pain economy.

In a similar way, the observer must carry the analysis through the classes up to the highest, the millionaire group. He will apply his ideal standard to utilities enjoyed; and to disutilities rendered by each group. It would be passing the margin of satiety and weariness to attempt a detailed analysis of each group's

place in the market. But the account would not be complete without reference to the capitalists' and the landowners' position. These begin to appear with the fourth of our non-competing groups. They represent here a novel element in the control of productive power. All the capabilities of the lower classes are theirs, with the addition of ownership rights in inert capital and land. To society's challenge as to the price they are prepared to offer, they add to the previous answers: "We have control of tools and materials; we have buildings and equipment; machines cunningly devised to aid in factory, mine, and forest. We have stores of food, clothing, and housing. We have factories, railroads, shops, forests, mines, and farms. We have capacity to furnish enlarged supplies of these aids to production, if the price be satisfactory."

Now let our philosopher consider the status of our individual from this well-to-do class in the matter of labor and wages. He receives an income for the use of his lands and capital. He has also an income from his labor. His marginal line of consumption stands higher than that of the preceding classes. The utility of an additional unit, or units, of goods is less to him than to them. As a consequence, he is less eager in his bidding. He counts the disutility of his marginal hours of labor at a dearer rate than do they. When he renders similar service he has equal pay per hour with them. But the final hours stand lower. They are nearer the first and pleasurable hours' service. Finally our observer will find the problem thrown into bold relief when he attempts to apply his measure to the income and outgo of an extensive landowner. Let the representative of this class be one of England's great landowners. He has made princely provision

for the private enjoyment of his family. He has town and country houses, parks and game preserves, golf courses, and pasture lands for his hunters. After all this he devotes the rest of his acres to production for general social use. Surely his sacrifice of abstinence per marginal acre is slight. Yet society rewards the abstinence that furnishes his marginal acre in the same measure as it does the abstinence of the poor yeoman, each of whom may furnish a single acre of equal fertility. The abstinence of all landlords passes current with the pains of laborers and sacrifices of capitalists. Neither is accounted good or bad. No Gresham's law affects the result. But if we apply the standard of utility and disutility drawn from our equalistic society, the conclusion is inevitable that such a land owning peer gets a large income for slight sacrifice. And further, that great inequality in the concentration of land ownership incurs a correspondingly large disparity between the rent incomes and the sacrifices of landowners. Finally, it must mean a like disparity between the reward for the abstinence of the few landowners and the income allotted for the pains of the many laborers. One must conclude that concentration of wealth means corresponding divergence between disutility endured and income enjoyed by the rich and the poor classes.

Let the rich be reduced to the level of the well-to-do and their control of productive power distributed among the poor. Let total savings be maintained unimpaired: let the only change be this altered distribution of control. How will the new and old owners be affected? First as to the disutilities of saving. The one per cent of rich will now save at the margin of disutility of the well-to-do. Each unit of capital produced here undoubtedly costs more sacrifice for

its production than at the old margin of the banished rich classes. Similarly they must labor more and practise more abstinence in the use of lands to maintain, as reasonable men, an equilibrium among their various sacrifices. More disutilities will be entailed on them. On the other hand, the poor save at a margin of disutility rising nearer to that of the well-to-do. Each unit produced costs the individual here less sacrifice than was true before. Consequently this 87 per cent of the population will, as reasonable men, labor less and abstain less in the use of land, that an equilibrium may be maintained among their sacrifices. All these gains come at a low level below the well-to-do line. All the losses come at a high level above that line. Each unit thus shifted shows clear social gain. Each unit of loss to the rich stands lower in social estimation than the unit of gain resulting to the poor. Every member of society evidences this when he appraises the disutilities necessary to production.

Consider the effects of the change again on the score of the altered incomes. The rich classes suffer diminution of income. They, perforce, cut their expenditures to the limits reached by the well-to-do. They forego the last added and least worth while units of consumption. On the other hand the rising poor class add enjoyments. These are of high value. In the estimation of all classes each unit added here is better worth while than a unit costing an equal amount of productive power added anywhere above the marginal consumption of the well-to-do. It is agreed that it brings greater utility for it stands before the other, both in society's and in each class's arrangement of consumption. Each shifted unit shows clear and marked social gain. The altered society has done what the reasonable man does in preferring comforts

above luxuries. The old rich class now foregoes luxuries that the poor may enjoy added comforts.

Note the conclusion: wages, and this means functional wages, are higher because of the change. In order that an equilibrium may be maintained among the various sacrifices and between these and the resulting incomes, the depressed rich supply the labor that the rescued poor forego. Savings follow the shifted control of units of capital and land. The old rich classes return lands to productive purposes; the newly enriched poor withdraw acres, perhaps in equal measure. The situation of society as a whole as to the supply of land, labor, and capital stands substantially as before. But slighter social pains in the disutility of marginal labor bring greater social pleasure in the utility of marginal additions to wage income. The real burden of labor is less, because the weight is better adjusted; the real reward is greater, because the goods are better adapted to the society's needs. Similar results follow every change in the direction of equality. Wages rise measured by an ideal standard. The opposite result attends every change in the contrary direction. Wages fall. Total hours may be the same, but more of them,—which means more sacrifice,—fall beyond the boundaries established in an equalistic society.¹

The ultimate standard of value, then, for modern society, does not exist as a positive measure. That it does not is due to the presence of a large degree of inequality. In such a society, either the utility standard or the disutility standard must include incomensurable quantities, or (perhaps better stated)

¹ Cf. Taussig, *op. cit.*, vol. i, p. 135. "The principle of diminishing utility, if applied unflinchingly, leads to the conclusion that inequality of means brings a less sum of human happiness than equality of incomes, and that the greater the inequality, the less the approach to maximum happiness."

qualities. The problem is insoluble as surely, and for much the same reason, as the older problem of squaring the circle. One cannot equate and unify either the pains or the pleasures of rich, well-to-do, and poor. We cannot find a positive measure of value in a society with such classes.¹ The ultimate word declares only that with a given concentration of wealth, the society discounts the pains of the poor in a certain degree. Likewise in such a society there is a corresponding over-estimate of the sacrifices of the rich. Again, in such society the utilities enjoyed by the various classes are measured by various standards. Great pleasures for the poor count little; slight pleasures for the rich count much. We must add to the formula: "value depends on scarcity and utility," the statement "each of these is conditioned by the existence of more or less of inequality."

As to the final question of the valuation of services, a question inextricably bound up with the valuation of goods, a similar conclusion must be reached. Wages depend "on the discounted marginal product of labor." Our social philosophers will add: "This, again, is qualified by the existing degree of inequality." Our hypothetical equalistic society and a modern society might be of equal size; equally well supplied with land, labor, and capital. The marginal hours of labor, acres of land, and units of capital might then be equally productive in a physical and material sense. Each society might work up an equal amount of raw materials into finished goods; so many pounds of wool and cotton into clothing; so many bushels of wheat into bread;

¹ Cf. Davenport, *op. cit.*, p. 570. In summary of Doctrine, "Neither in utility on the demand side nor in pain cost on the supply side can there be found a common denominator or standard or determinant of market value, or of price as its money expression. The only common denominator of value is found in the selection of a conventional standard for the purpose, a price commodity."

so many pounds of iron into tools, buildings, and household utensils. In our equalistic society they would be better than the poorest products of our modern society, less fine than the best. They would need neither the shoddy garments of the poor nor the vain trappings of the rich. The utilities rendered by the garments, *i. e.*, their value by our ideal standard, would be greater than in the modern society. The absence of shoddy means the elevation of individuals above a pain economy; the absence of the vanities means that their elimination has been accomplished only at the expense of the slightest utilities conferred through the satisfaction of the want for clothing. Ostentatious extravagance may be supplanted by solid comfort, genuine culture. Here is clear gain in utility, in real income, psychic income, if you please.

Again, as to disutilities, each of the two societies may have equal amounts of labor. But the equalistic entails equal sacrifices on all, heavy burdens on none. The marginal sacrifice, therefore, is lighter, and the total sacrifice is less. It is agreed that the marginal sacrifice measures each sacrifice. It must be compensated to induce the needed labor. But its physical product is equal in the two societies, and this equivalent marginal product represents wages. It necessarily follows then that a lighter marginal sacrifice in the equalistic society reaps a reward equivalent in the physical sense to that in the modern society, and this reward confers greater total benefit, greater physic income. The burdens of production are better adjusted to secure minimum pains. The makeup of the national dividend is better conceived to provide maximum pleasures. As our modern society approaches nearer this condition, wages rise. This is total or functional wage. As it moves farther from it, functional

wages fall. Conditioning and qualifying the valuation of services, the wages problem is the fact of inequality, the greater or less concentration in the control of productive power.¹

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¹ Cf. Taussig, p. 207 (ch. li, *General Wages*): "An all embracing and considerable advance can come, under the regime of private property, only if productivity is increased, if the margin is keyed up, if the discount is narrowed by the accumulation and competition of capital. Everything that raises the productive margin, that lessens the rate of discount, tends to raise wages; and in the last resort it is only in these ways that a general advance can be brought about." The suggestion above is that a movement in the direction of equality means as a necessary consequence a general rise in wages.